

**REMARKS**

Claims 23-30 are pending in the present application to which the Examiner asserts several rejections to which the Applicants respond in the following order:

- I. Rejections Under 35 U.S.C. § 112
  - A. Claims 23-30 are rejected under ¶ 1 for allegedly lacking enablement.
  - B. Claims 23-30 are rejected under ¶ 1 for allegedly failing to comply with the written description requirement.
  - C. Claim 29 is rejected under ¶ 2 for allegedly being indefinite.

**I. The Claims Are Enabled**

The Examiner asserts that:

The instant specification fails to teach how to make any nucleic acid that is at least 90% homologous to SEQ ID NO: 1 or 3 ...

*Office Action pg. 3.* The Applicants disagree because the Examiner has misinterpreted the claim scope, for example:

Nucleic acids with 90% identity to the 2406 nucleotide long SEQ ID NO: 1 would have 240 nucleotide substitutions relative to SEQ ID NO: 1. These nucleic acids thus encompass those that encode proteins with 240 amino acid substitutions relative to the 801 amino acid long SEQ ID NO:2; these proteins would be 70% identical to SEQ ID NO: 2.

*Office Action pg. 4.* The Examiner has miscalculated by not taking into account the triplet coding pattern that translates a nucleic acid sequence into an amino acid sequence. Consequently, the Examiner's conclusion that 240 nucleotide substitutions would result in 240 amino acid substitutions is an overstatement. Where most changes are made in a way that do not result in a different amino acid, 240 nucleotide substitutions would result in a smaller number of amino acid changes.

Nonetheless, without acquiescing to the Examiner's argument but to further the prosecution, and hereby expressly reserving the right to prosecute the original (or similar) claims, Applicants have amended Claim 27 to encode SEQ ID NO:2<sup>1</sup> and Claim 23 to recite core amino acid sequences of SEQ ID NO:2 having "residues 747-801, residues 679-799, residues 623-691, residues 316-381, residues 244-277, residues 186-221, or residues 95-121" that may be encoded by a nucleic acid (i.e., for example, Ftn2 nucleic acid homologues having a portion of which that is at least 90% homologous to SEQ ID NOs: 1 or 3). *Applicant's Specification*, pg. 92, Example 3, Table 3). Claims 24 and 25 were concomitantly amended in order to maintain proper antecedent basis. These amendments are made not to acquiesce to the Examiner's argument but only to further the Applicants' business interests, better define one embodiment and expedite the prosecution of this application.

The Applicants respectfully request that the Examiner withdraw the Enablement rejection.

## **II. The Specification Provides A Sufficient Written Description For The Claims**

The Examiner provides a Written Description rejection on primarily the same basis as the above Enablement rejection:

Hence, Applicant has not, in fact, described a nucleic acid that is at least 90% homologous to SEQ ID NO: 1 or 3 within the full scope of the claims, and the specification fails to provide an adequate written description of the claimed invention.

*Office Action*, pg 9. The Applicants disagree on the same basis as discussed above in regards to Enablement. Further, due to the above claim amendments, made for other reasons, the Applicants now believe that the present Written Description rejection is moot.

The Applicants respectfully request that the Examiner withdraw the Written Description rejection.

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<sup>1</sup> The Examiner admits the specification is enabled for a nucleic acid encoding SEQ ID NO: 2.

**III. Claim 29 Is Not Indefinite**

The Examiner states that:

It is not clear in claim 29 if the plant seed comprises the vector or o[i]f the seed is transgenic because it has been transformed with some other nucleic acid.

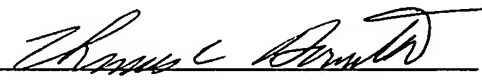
*Office Action pg 11.* The Applicants disagree because Claim 29 does not have “a vector” as a claimed element. Consequently, one having ordinary skill in the art would not be confused as to the Examiner’s alternative claim interpretations. Nonetheless, without acquiescing to the Examiner’s argument but to further the prosecution, and hereby expressly reserving the right to prosecute the original (or similar) claims, Applicants have amended dependent Claim 29 to reflect the construction of dependent Claim 28 by deleting “transgenic” from modifying “A plant seed”. This amendment is made not to acquiesce to the Examiner’s argument but only to further the Applicants’ business interests, better define one embodiment and expedite the prosecution of this application.

The Applicants respectfully request that the Examiner withdraw the Indefiniteness rejection.

**CONCLUSION**

The Applicants believe that the arguments and claim amendments set forth above traverse the Examiner’s rejections and, therefore, request that all grounds for rejection be withdrawn for the reasons set above. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, the Applicants encourage the Examiner to call the undersigned collect at 617.984.0616.

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